

★NICH- U11 1999-597015/51 ★JP 11261114-A High intensity wavelength conversion light emitted diode for display applications — has fluorescent pigment or dye formed in between semiconductor light emitting device and outer resin mold, which emits long wavelength light beam when excited by short wavelength light beam

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U12 (1999.09.24) H01L 33/00

Addnl. Data: 1993-230325/29 1998-278251/25

NOVELTY - A gallium nitride group compound semiconductor light emitting element (11) is installed on a metal stem (2), which is surrounded by a convex lens shaped resin mold (4). A fluorescent pigment or dye (5) is provided around the semiconductor light emitting device which emits long wavelength light, when excited by short wavelength light generated by light emitting device.

Use: For display applications.

Advantage: Enables emission of light beams of different wavelengths. Converts short wavelength light beam into long wavelength light beam and thereby improves energy efficiency. DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of an LED. (2) Metal stem; (4) Resin mold; (5) Fluorescent pigment or dye; (11) Light emitting element. (3pp Dwg.No.2/2)

N1999-441292

U11-D01B1; U11-D01C9; U11-E02A1; U12-A01A1A; U12-A01A4

